

## (TRANSLATION)

## Japanese Laid-open Utility Model Publication (Kokai)

No. 156300/77

Laid-open (Kokai) Date: November 28, 1977  
Title of Design: Simplified Fire-extinguishing  
Equipment  
Utility Model Application No.: 59583/77  
Date Filed: April 1, 1972  
Claimed prior patent application date  
Designer: Kinji Hayashi  
Applicant: Kinji Hayashi

## SPECIFICATION

## 3. Detailed Explanation of this Design

The drawing shows the implemented example of the equipment of this design. 1 is the pressure-tank comprising the closed-structure capable of containing a large capacity of water such as 5 ton or 10ton, etc. according to the size of the fire-extinguishing area, and disposed in the position no obstructions for the water-supplying, the fire-extinguishing for the constructed subjects in the standing trees. In this pressure-tank, the accesary-appliances such as the man-hole 5, the safety-faucet 6, etc. are fixed, when the water-face (drawing left out) formed in the tank is subjected to the gas-prssure from the later-mentioned pressurized gas pipe 3, the water (pressurized) forced to spray by the gas-pressure from the waterk-sending pipe is sent out, and the water discharge is made for the nesessary water-spray is carried out to the necessary fire-extinguishing spot.

7, 7... are the waterk-spraying equipment arranged in the above-mentioned fire-extinguishing equipments disposed in the positions of the fire-extinguishing points a, b, c, d... are each branch-pipes 2a, 2b, 2c, 2d ..., the discharging valve 7a, 7b, 7c, 7d...connected thereto, the hose 7c connecting to the - discharging-valve 7a, 7b, 7c, 7d ..., the hose 7c connected to the discharging valve, the nozzle 7b is provided, upon discharging water, first of all opens the discharging-valve 7a, holds the nozzle 7b, and the water-discharge is made

to the intended direction. And in each fire-extinguishing points, the power gas bomb 4 is arranged forming the interlinked group is arranged. For example among them the 4a is a-point, 4b is b-point, 4c is c-point, 4d is d-point, disposed. This power-gas bomb is filled with the liquified-gas, compressed-gas such as the CO<sub>2</sub> gas, the nitrogen-gas, and by the direct or remote operation, this gas is discharged, and sent in the pressure-tank, at the same time through the branch-pipes 3a, 3b, 3c, 3d ..., the residual power-gas-bomb is opened and is made to start. These power-gas bomb 4 send the gas to the pressure-tank by opening the valve itself (for example, the opening-valve of 7a of point a), at the same time this gas-power gas bomb opens valve (7a of point b, 7a of point c, 7d of point c opens valve one after another), the gas-pressure is added to the water-face of the pressure-tank, the water is sent by means of the valve 7a of only point by means valve 7a in the first point a, and the water is sent by means of the valve 7a only to the first point water is sent, and gas-pressure is added, send water by means of the valve 7a at only the point a first of all, the discharge only the nozzle 7b sent water by means of valve 7a only of first point, the water-sending is send only from the nozzle 7b, water thus discharged. At this time the water is concentrated to the nozzle 7b interlinded to the valve (7a of point a), and does not send water to other nozzle. Namely by selecting the water-discharge position, the valve of one power-gas bomb 4a is opened, at this time valve-opened (7a of point a) the discharging water is concentrated only to the nozzle 7b, and water is not sent to the other nozzle. Namely for example by selecting the water-discharging position, one power-gas bomb valve 4a is opened, and the water-discharging valve 7a of the fire-point is opened, thereby the water-discharging is carried out from the water-discharging nozzle 7b interlinded to this 7a, at the same time automatically from the the power-gas bomb 4a by way of the branching-pipes 3b, 3c, 3d..., the power-gas bomb 4b, 4c, 4d ... open the valves altogether, the pressure-gas is sent to the pressure-tank, the water-discharging pressure is elevated, the water is sent by all the pressure of the pressure-gas bomb.

Fig. 2, Fig. 3 show an above-stated example of the pressure-gas bomb, in this drawings, 8 is the manual-lever for opening valve, 4 rotates the the manual-lever 8 in the arrow-mark direction, at the same time the discharged pressure-gas is sent to the air-cylinder of the other pressure-gas bomb and opens the valve, and the pressure-gas in the bomb is sent to the pressure-tank.

In the meantime 10 in the drawing is the roller working together contacting the leading-face 8a, 11 is the protruding-piece arranged in the manual-lever that regulates the rotating-range of the manual-lever arranged in the manual-

lever. By the rotation of the manual-lever, the piston in the air-cylinder is moved, this piston is made go ahead to open valve.

And in the position near the bomb of the branching-pipe, the chick-valve 10 connecting the valve-apparatus of the gas-bomb is arranged, when the fire wraps or valve apparatus is damaged by the fault, the reverse flow of the pressure-gas is controlled, the decreasing imposing pressure to the pressure-tank is prevented. (thereby discharging-water power goes down) Further the alarming-equipment 12 generating the alarm by the pressureds-gas according to the necessity or the remote-control operation-starting equipment is arranged some of the chances.

Reg. 1

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公開実用新案公報

⑩実用新案出願公開  
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審査請求 有

(全 2 頁)

⑭簡易消火装置

⑮実 願 昭52—59583

⑯出 願 昭47(1972)4月1日

(前特許出願日援用)

⑰考 案 者 林金治

兵庫県宍粟郡一宮町安積1310の  
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⑱出 願 人 林金治

兵庫県宍粟郡一宮町安積1310の  
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⑲代 理 人 弁理士 林清明

⑳実用新案登録請求の範囲

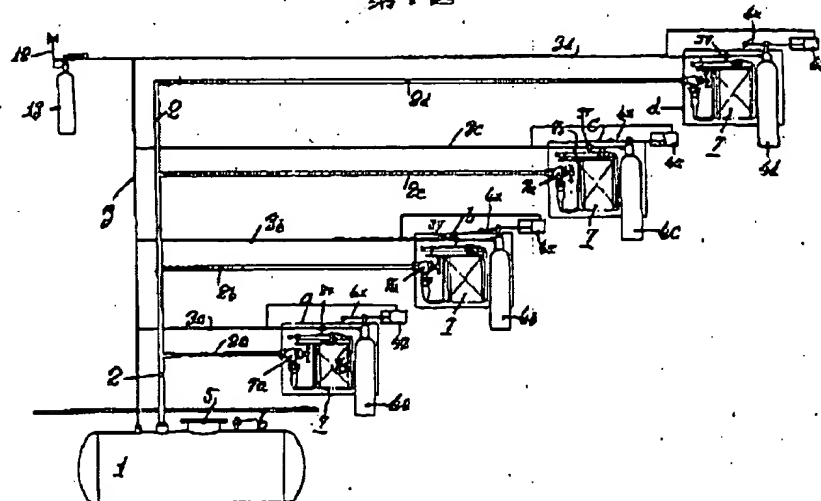
系統内の原動ガスポンプ夫れ自体の開弁により、その圧気を水を貯えた圧力タンクに送ると共に、自己以外の原動ガスポンプの弁を起動してその圧気を同じ圧力タンクに追加するよう発動する弁装置を具備する原動ガスポンプと、別の操作によつて開弁し、前記圧力タンクの水をホースを通じて放水させる放水弁とより成る放水装置とを組とする多数の組を具備し、この組の夫々を予め設定したる消火点に散設し、前記の弁装置群を一つの圧気系内に、又前記放水群を一つの送水系内に夫々接続することにより弁装置群の一つの弁装置の開弁により、全部の弁装置を自動的に開弁して圧力

タンクに全圧を加え、所望の一消火点に放水すべく各組を連繫することを特徴とする簡易消火装置。  
図面の簡単な説明

第1図は本考案全般を示す説明図、第2図は弁部分の側面図、第3図は平面図である。

1……圧力タンク、2, 2a~2c……送水パイプ(分岐管)、3, 3a~3d……圧気パイプ(ガスパイプ=分岐管)、4, 4a~4d……原動ガスポンプ、5……タンクマンホール、6……安全栓、7……ホース、8……手動レバー、9……エアーシリンダー、10……逆止弁、11……突片、12……警報器。

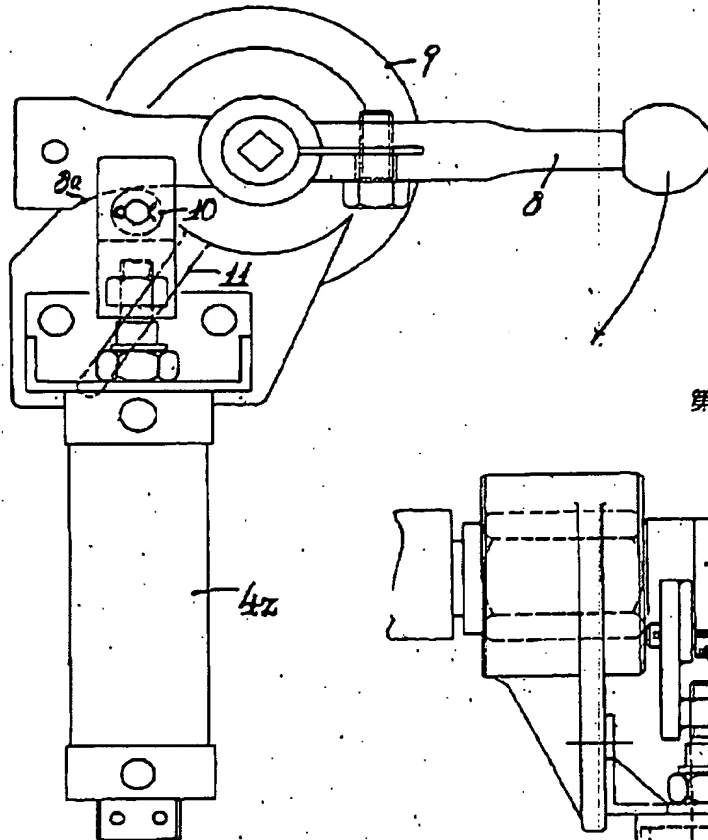
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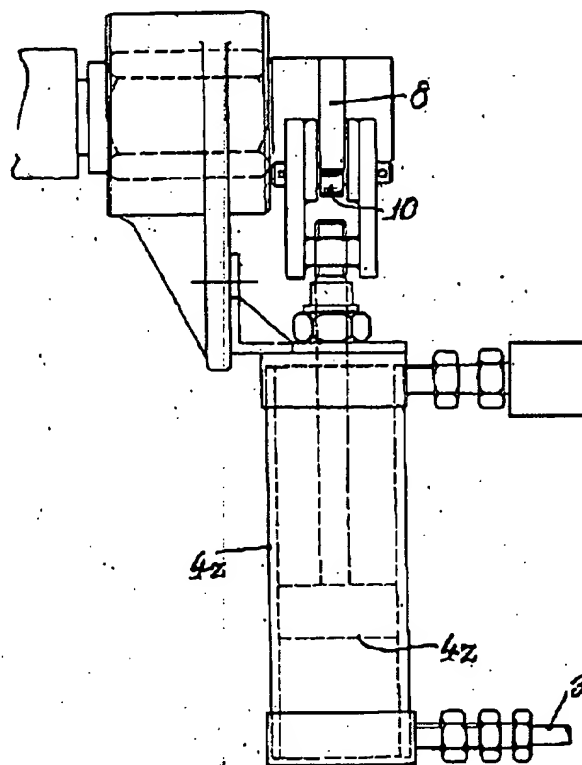
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第2図



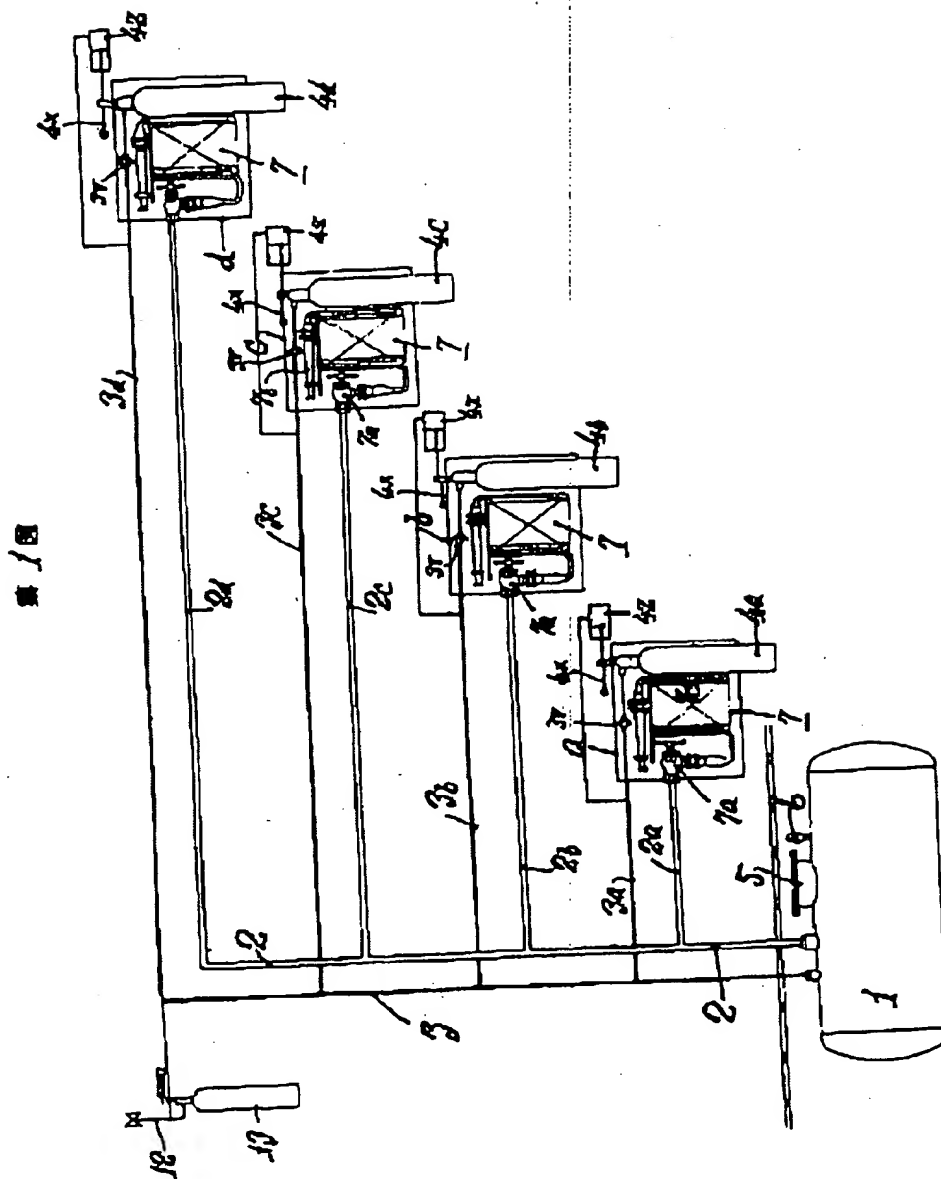
第3図



公開実用 昭和52-156300

Ref-1

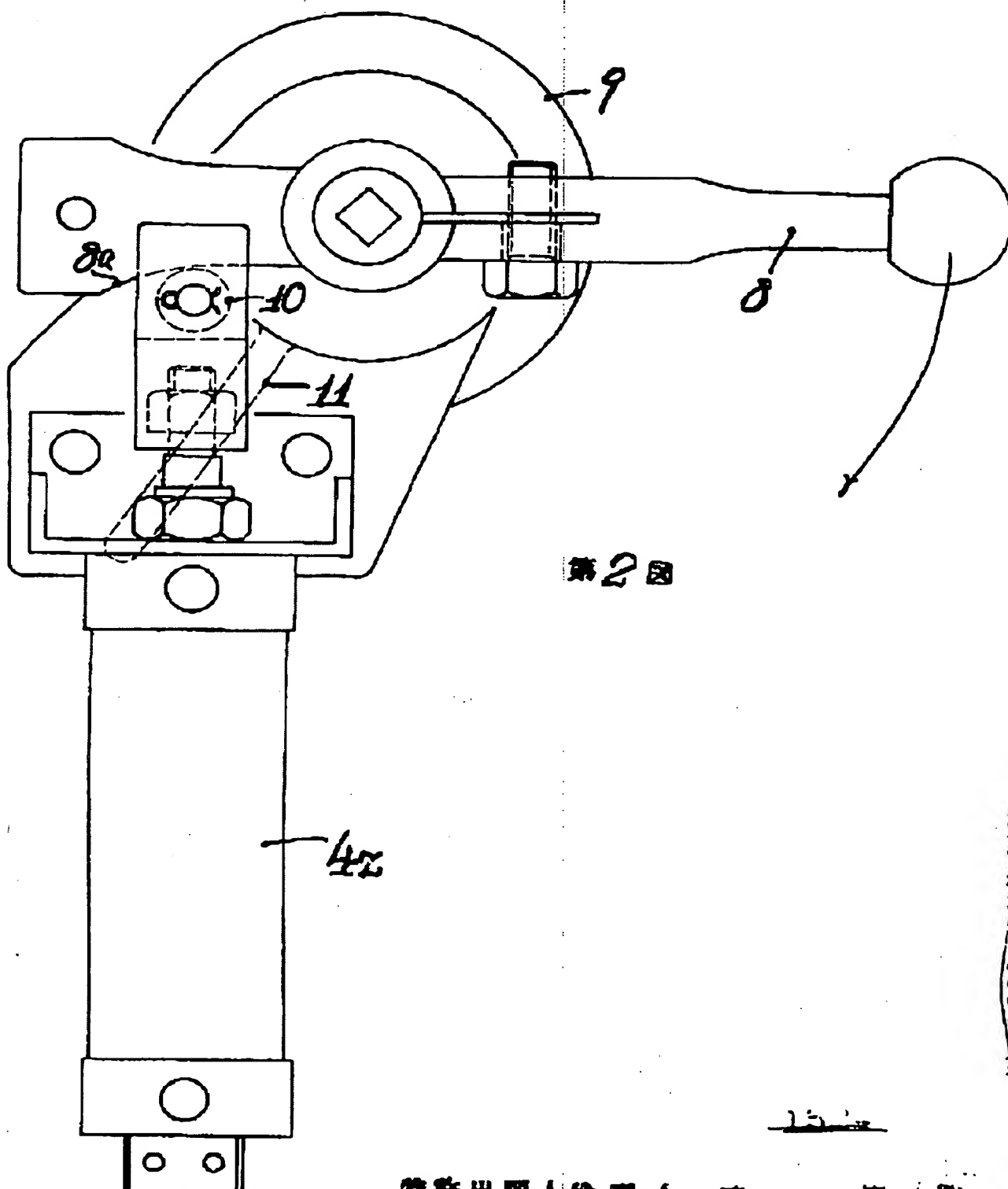
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Ref-1



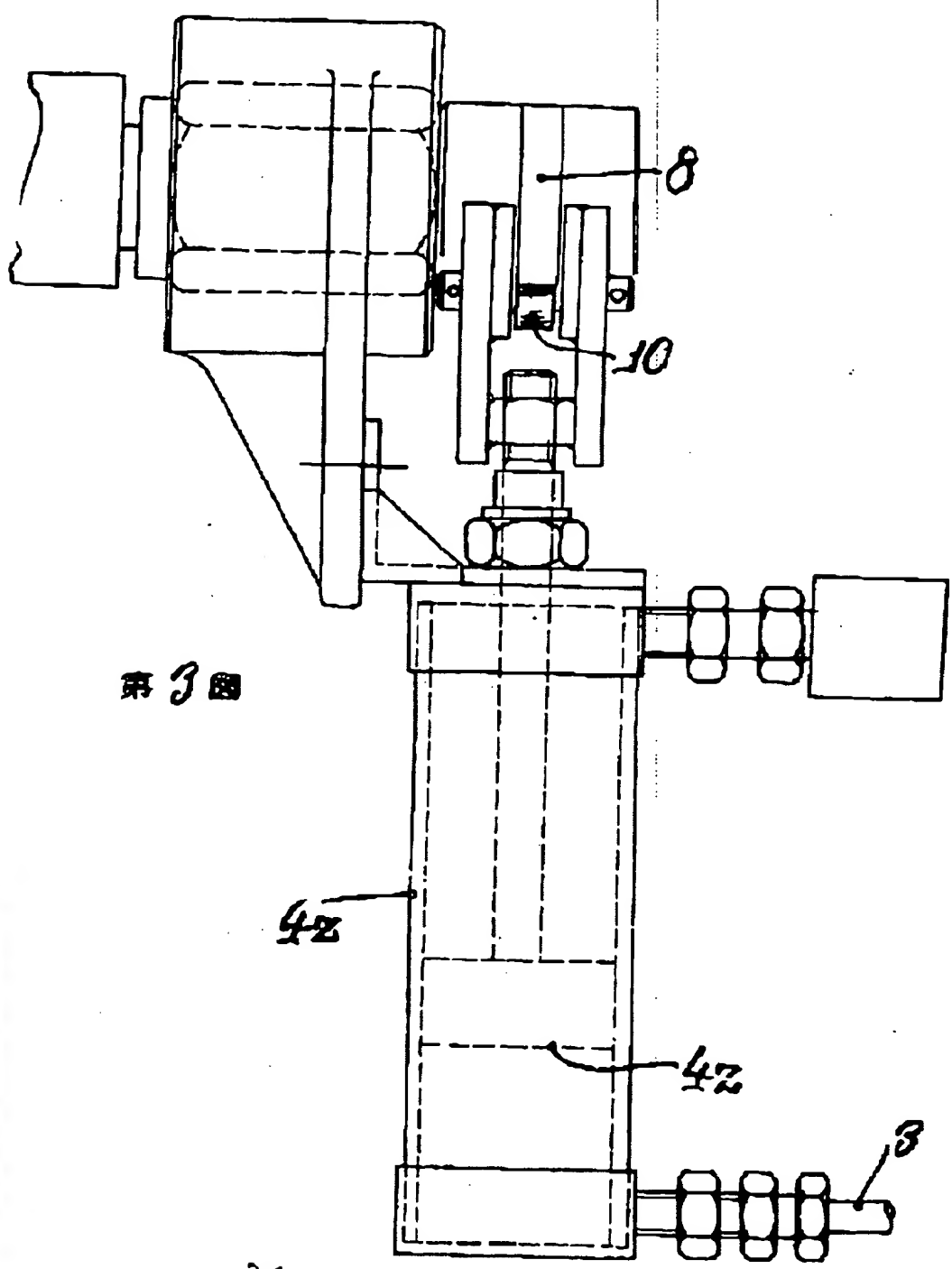
第2図

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156300 2/3

特許出願人代理人 株式会社 明

Ref-1



第 3 圖

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特許出願人代理人 林 清 敬



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